

Remarks:

By this Amendment, Applicants have amended claims 6, 7 and 8. Claims 6-9 are pending.

Claim Rejections Under Section 102 and Section 103

Claims 7-9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Stovall, and claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Stovall in view of Ali. By this Amendment, Applicants respectfully traverse the Section 102(e) and Section 103(a) rejections.

Claims 6 and 7 are independent claims, with claims 8 and 9 directly dependent on claim 7.

Turning first to independent claim 6, it is directed to a transducer-supporting structure including the following elements;

- a transducer for recording and reproducing information to and from a medium,
- a transducer mounting section mounted with the transducer and configured to contact the medium by means of mechanical action or to maintain a fixed distance from the medium,
- a suspension which supports the transducer mounting section and elastically positions the transducer in a direction so as to move the transducer to and from the medium, and
- a thermal coupling member extending between the transducer and the transducer mounting section for thermally coupling the transducer with the suspension,
- wherein the thermal coupling member is a gel-form substance, **the transducer and the suspension being coupled thermally with each other via the gel-form substance, and**

- **at least a part of heat generated in the transducer is dissipated through the suspension via said gel-form substance.**

Applicants submit that the transducer-supporting structure defined by claim 6 is patentably distinguished from the Stovall and Ali Patents, at least based on the requirement that the thermal coupling member extends between the transducer and the transducer mounting section so that at least part of the heat generated in the transducer is dissipated through the suspension via the thermal coupling member which is defined as a gel-form substance.

Independent claim 7 is also directed to a transducer-supporting structure and includes the following elements:

- a transducer for recording and reproducing information to and from a medium,
- a transducer mounting section mounted with the transducer and configured to contact the medium by means of mechanical action or to maintain a fixed distance from the medium,
- heat dissipating means formed integrally with the transducer and providing connection between the transducer and the transducer mounting section and
- a suspension for holding the transducer at a desired position with respect to the recording medium,
- **wherein the heat dissipating means thermally couples the transducer and the suspension, and**
- **at least a portion of heat generated in the transducer is dissipated through the suspension via the heat dissipating means.**

Applicants submit that independent claim 7 is patentably distinguished from the references of record at least based on the requirement that the heat dissipating means is formed integrally with the transducer and provides a connection between the transducer and the transducer mounting section, and thermally couples the transducer and the suspension so

that at least a portion of the heat generated in the transducer is dissipated through the suspension via the heat dissipating means.

The features noted above with respect to claims 6 and 7 which patentably distinguish these claims from the references of record are generally referred to as the "Heat Dissipating Features" of Applicants' claimed invention, which is neither taught nor suggested in the references of record.

The Stovall Patent in general relates to a head gimbal assembly which includes a magneto-resistive read element integrated with a thermally assisted write element. The head gimbal assembly includes an optical waveguide positioned between two write poles to transmit a laser beam to a recording medium. The laser beam heats the medium sufficiently and lowers its coercivity in order to facilitate writing. A laser assembly is attached to a suspension for achieving direct coupling of the laser beam to an input end of the optical wave guide.

In the Stovall Patent, Applicants note that a feature of Stovall's laser mounting for a thermally assisted GMR head is the use of a mounting block 26 for dissipating heat from a laser 24. The mounting block 26 is connected to a suspension (see column 2, line 64-66), but nowhere in the Stovall Patent is there any teaching or suggestion of a thermal coupling means or a heat dissipating means which thermally couples the transducer to the suspension as required in Applicants' independent claims 6 and 7. In other words, the Stovall Patent does not teach or suggest the Heat Dissipating Features of Applicants' claimed invention.

The Ali Patent in general relates to a memory module having a packaging cover to encapsulate a board having multiple separate chips, which dynamically generate varying amounts of heat. The packaging cover provides localized heat dissipation among the multiple separate memory chips. The separate chips are interconnected to the board via a set of solder balls. The packaging cover further provides a rigid encapsulation of the board and chips. In one embodiment of the Ali memory module, a thermally conductive substance is displaced within the packaging cover to conduct heat from the separate chips to the packaging cover. And in one embodiment, a top cover and bottom cover of the packaging cover are assembled with a separate frame to secure a coupling between the top and bottom covers of the packaging cover.

More specifically, Applicants note that the Ali Patent has been cited for teaching the use of a thermally conductive gel which provides a thermal coupling between a memory chip and an inner surface of a packaging cover (see column 3, lines 23-25). But nowhere in the Ali Patent is there any teaching or suggestion of a thermal coupling means or a heat dissipating means which thermally couples the transducer to the suspension as required in Applicants' independent claims 6 and 7. Simply put, there is no teaching or suggestion in the Ali Patent of the Heat Dissipating Features of Applicants' claimed invention.

Because the references of record lack the above-noted features of claims 6 and 7, as well as dependent claims 8 and 9, it is Applicants' position that the Section 102(e) and Section 103(a) rejections should be withdrawn.

In view of the foregoing remarks and amendments, Applicants respectfully submit that claims 6-9 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,

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